

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO.  
FOR  
BAKER COMMODITIES, INC.  
HANFORD HIDE SKINNING AND HIDE CURING FACILITY  
KINGS COUNTY

This Monitoring and Reporting Program (MRP) is required pursuant to California Water Code section 13267. The Discharger shall submit within **30 days** following issuance of this MRP a flow schematic identifying sample locations and irrigation blocks specified in this MRP.

**The Discharger shall not implement any changes to this MRP unless and until the Regional Board adopts or the Executive Officer issues a revised MRP.** Changes to sample location shall be established with concurrence of Regional Board's staff, and a description of the revised stations shall be submitted to the Regional Board for the approval of the Executive Officer. Changes to sample locations shall be established with concurrence of Regional Board's staff, and a description of the revised stations shall be submitted to the Regional Board and, following approval of the Executive Officer, attached by the Discharger to its copy of this Order. All samples should be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each sample shall be recorded on the sample chain of custody form. All analyses shall be performed in accordance with Standard Provisions, Provisions for Monitoring. The results of analyses performed in accordance with specified test procedures, taken more frequently than required at the locations specified in this MRP, shall be reported to the Regional Board and used in determining compliance.

Field test instruments (such as pH) may be used provided that:

1. the operator is trained in the proper use of the instrument;
2. the instruments are calibrated prior to each use;
3. instruments are serviced and/or calibrated by the manufacturer at the recommended frequency;
- and
4. field calibration reports are submitted as described in the "Reporting" section of this MRP.

Each laboratory report shall clearly identify the following:

1. analytical method;
2. measured value;
3. units;
4. what constituent a value is reported as;
5. method detection limit (MDL);
6. reporting limit (RL) (i.e., a practical quantitation limit or PQL); and
7. documentation of cation/anion balance for general minerals analysis of supply water and groundwater samples.

All laboratory results shall be reported down to the MDL. Non-detected results shall be reported as less than the MDL (<MDL). Results above the MDL, but below the concentration of the lowest calibration standard for multipoint calibration methods or below the reporting limit for other methods shall be flagged as estimated.

Analytical procedures shall comply with the methods and holding times specified in: *Methods for Chemical Analysis of Water and Wastes* (EPA-600/4-79-020, 1983); *Methods for Determination of Inorganic Substance in Environmental Samples* (EPA/600/R-93/100, 1993); *Standard Methods for the Examination of Water and Wastewater, 20th Edition* (WEF, APHA, AWWA); and *Soil, Plant and Water Reference Methods for the Western Region, 2003, 2<sup>nd</sup> Edition, 2003* (hereafter Western Region Methods).

### INFLUENT FLOW MONITORING

Lagoon influent flow shall be measured before discharge into the lagoons and shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Flow	gallons	Continuous	Daily <sup>1</sup>
Total Monthly Flow	gallons	Computed	Monthly
Average Daily Flow	gal/day	Computed	Monthly

<sup>1</sup> Sample frequencies referenced in this program as "Daily" shall not include days on which there is no flow.

### LAGOON MONITORING

Permanent markers (e.g., staff gages) shall be placed in all lagoons with calibrations indicating the water level at design capacity and available operational freeboard. The freeboard shall be monitored on all lagoons to the nearest tenth of a foot. Lagoon monitoring shall include at least the following for Lagoons No. 1 through No. 3:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Freeboard <sup>1</sup>	feet <sup>2</sup>	Observation	Weekly

<sup>1</sup> Freeboard shall be monitored to the nearest tenth of a foot.

### DISCHARGE MONITORING

Discharge monitoring samples shall be collected from the influent to the unlined lagoons until the lined lagoons are constructed, and from the discharge point of the last lagoon thereafter. Discharge monitoring shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
pH	mg/L	Composite/Grab	Monthly
Electrical Conductivity	µmhos/cm	Composite/Grab	Monthly
Chloride	mg/L	Composite/Grab	Monthly
Sodium	mg/L	Composite/Grab	Monthly
Total Dissolved Solids (TDS)	mg/L	Composite/Grab	Monthly
Fixed Dissolved Solids (FDS)	mg/L	Composite/Grab	Monthly
BOD	mg/L	Composite/Grab	Quarterly <sup>1</sup>

MONITORING AND REPORTING PROGRAM NO.  
BAKER COMMODITIES, INC.  
HANFORD HIDE SKINNING AND HIDE CURING FACILITY  
KINGS COUNTY

-3-

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Suspended Solids	mg/L	Composite/Grab	Quarterly <sup>1</sup>
Ammonia (as NH <sub>3</sub> -N)	mg/L	Composite/Grab	Quarterly <sup>1</sup>
Nitrate (as N)	mg/L	Composite/Grab	Quarterly <sup>1</sup>
Total Kjeldahl Nitrogen (TKN)	mg/L	Composite/Grab	Quarterly <sup>1</sup>
Total Nitrogen (as N)	mg/L	Composite/Grab	Quarterly <sup>1</sup>
General Minerals <sup>2</sup>	mg/L	Composite/Grab	Annually <sup>3</sup>

<sup>1</sup> January, April, July, October

<sup>2</sup> General Minerals as referred to in this program shall include the constituents in the General Minerals Analyte List presented below.

<sup>3</sup> October

**General Minerals<sup>1,2</sup>**

Alkalinity	Electrical Conductivity (EC)	Sodium
Bicarbonate	Hardness	Sulfate
Calcium	Magnesium	Total Dissolved Solids (TDS)
Carbonate	pH	
Chloride	Potassium	

- General minerals analyte lists may vary depending on the laboratory, but shall include at least the above analytes and properties. Except for wastewater analyses, an anion/cation balance demonstrating that analyses are complete should accompany results.
- Samples placed in preserved bottles shall first be filtered through a 0.45 µm nominal pore size filter. If field filtering is not feasible, samples shall be placed in unpreserved containers and submitted to the laboratory within 24 hours with a request (reflected on the chain-of-custody form) to immediately filter then preserve the sample.

**GROUNDWATER MONITORING**

Prior to collecting samples and after measuring the water level, each monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 volumes of the standing water within the well casing and screen, or additionally the filter pack pore volume.

Samples shall be collected from approved monitoring wells and analyzed for the following constituents at the following frequency:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
Depth to groundwater	feet, to the nearest 0.01 foot	Measured	Semi-annually <sup>1</sup>
Groundwater elevation	feet above mean sea level, to the nearest 0.01 foot	Calculated	Semi-annually <sup>1</sup>

MONITORING AND REPORTING PROGRAM NO.  
BAKER COMMODITIES, INC.  
HANFORD HIDE SKINNING AND HIDE CURING FACILITY  
KINGS COUNTY

-4-

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
EC	µmhos/cm	Grab	Semi-annually <sup>1</sup>
pH	pH Units	Grab	Semi-annually <sup>1</sup>
TDS	mg/L	Grab	Semi-annually <sup>1</sup>
Sodium	mg/L	Grab	Semi-annually <sup>1</sup>
Chloride	mg/L	Grab	Semi-annually <sup>1</sup>
Nitrate (as NO <sub>3</sub> -N)	mg/L	Grab	Semi-annually <sup>1</sup>
General Minerals	mg/L	Grab	Annually <sup>2</sup>

<sup>1</sup> April and October

<sup>2</sup> October

Quarterly groundwater monitoring reports shall contain the following:

1. A statement certifying when monitoring instruments and devices used in monitoring groundwater were last calibrated, including identification of who performed the calibration.
2. A summary of groundwater monitoring in a format (both printed and electronic) selected in concurrence with Regional Board staff, including
3. Contour maps showing the gradient and direction of groundwater flow under/around the waste management unit, based upon water level elevations taken prior to the collection of the water quality data. The contour map shall be constructed using groundwater surface elevations from the Facility's monitoring wells;
4. Graphs of the laboratory analytical data for samples taken from approved wells within at least the previous five calendar years (as data become available). Each such graph shall plot the concentration of one or more waste constituents specified below over time for a given monitoring well, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values. For any given constituent, the scale for the background plots shall be the same as that used to plot downgradient data. Separate graphs shall show hydrologic equipotential gradients and equal concentration gradients for constituents below selected in concurrence with Regional Board staff.

Groundwater Constituents to Evaluate

Electrical Conductivity  
Sodium  
Chloride

TDS  
Nitrate (as N)

### BRINE WASTE MONITORING

Brine waste shall be monitored monthly for the following:

1. Quantity generated
2. Quantity shipped
3. Destination of the shipped brine waste
4. Quantity currently in storage

Truck manifest records for the brine waste shall be kept at the Facility for a minimum of five years and made available to Regional Board staff upon request, so that Regional Board staff may confirm who receives the brine waste, in what quantities, and when.

### WATER SUPPLY MONITORING

The supply water for the Facility shall be monitored as follows:

<u>Constituent</u>	<u>Units</u>	<u>Measurement</u>	<u>Frequency</u>
General Minerals	mg/L	Grab	Annually <sup>1</sup>
Nitrate	mg/L	Grab	Annually <sup>1</sup>

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<sup>1</sup> October

### REPORTING

The Discharger shall report monitoring data and information as required in this MRP and as required in the Standard Provisions and Reporting Requirements. All reports submitted in response to this MRP shall comply with the signatory requirements in Standard Provisions, General Reporting Requirements B.3. Monitoring reports shall be submitted to the Regional Board quarterly and shall be submitted by **1<sup>st</sup> day of the second month following the quarter the samples were collected** (i.e., the 1st Quarter report is due by 1 March).

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner that illustrates clearly whether the Discharger complies with waste discharge requirements. If the Discharger monitors any waste constituent or parameter at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the discharge monitoring report.

By **1 February of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

1. The names and general responsibilities of all persons in charge of wastewater treatment and disposal.
2. The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations.

MONITORING AND REPORTING PROGRAM NO.  
BAKER COMMODITIES, INC.  
HANFORD HIDE SKINNING AND HIDE CURING FACILITY  
KINGS COUNTY

-6-

3. An updated copy of the Employee Training & Responsibility Log signed by the individuals currently responsible for implementation of the Facility's Sampling and Analysis Plan that was submitted in accordance with [Provision E.6](#).
4. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.3).
5. A statement regarding whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment facility as currently constructed and operated, and the dates when these documents were last reviewed for adequacy.
6. The results of an annual evaluation conducted pursuant to Standard Provision E.4 and a figure depicting monthly average discharge flow for the past five years.
7. A summary and discussion of the compliance record for the reporting period. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with this Order.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

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THOMAS R. PINKOS, Executive Officer

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(Date)

SJK/DKP: 11/10/2005